

# Web Tech SET08101 Coursework Assignment 1

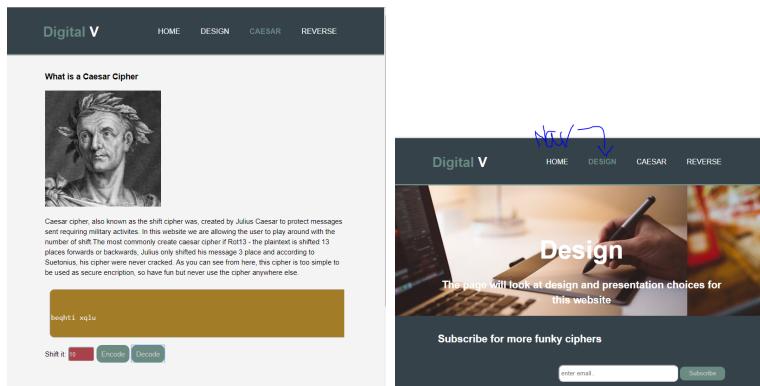
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## 1 Introduction

The purpose of this coursework was to create a website with two different classical ciphers using JavaScript with HTML and CSS. As a newbie in the world of programming I found this assignment interesting and challenging. This report contents are split into areas about my choice to keep the interface of the website simple and clean. The challenges faced with JavaScript and how I struggled to understand how to put my cipher research and ideas into code.

### 1.1 Overview of the website



The website I created is retro in colour and style, with classic fonts that will be accessible in all browsers. During the creation of this website I took the time to read selective pages from the following books.

- JavaScript: The Good parts: this book was great for going through my list and trying to work out what each section meant.
- JavaScript The Definitive Guide: very good reference book but after awhile it felt slightly overwhelming with information.
- JavaScript Algorithms and Application for Desktop and Mobile Browsers: although the version I took out from the library is old, I found the information on functions and events very clear and easy to follow.

The large part of my learning and research was mainly online and YouTube search. This wasn't always productive but a mixture of both books and videos helped to keep me engaged.

## 2 Software Design

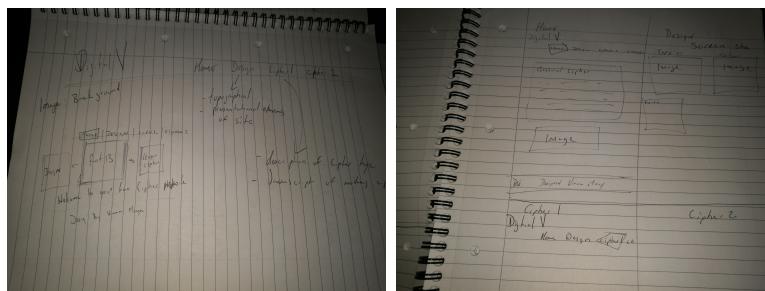
My plan for tackling this coursework was to learn and practise JavaScript using YouTube and Udemy tutorials to better understand how to implement the codes.

### 2.1 List of requirements for this website:

- Provide 4 page website, of which tow must contain ciphers
- Functional navigation between pages
- Working ciphers created using JavaScript only
- create and make available a git clone URL to push and commit final code
- make sure all button are usable

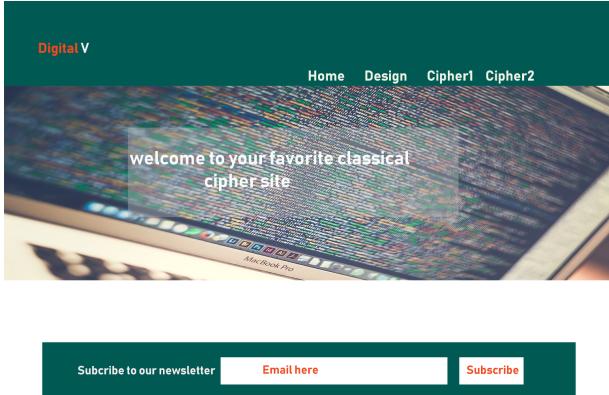
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### 2.2 Creative website sketch and mockups



While planning the website, I created a couple of sketches to put help develop the layout. The sketches were draft quickly where ideas for forming on how best to present the ciphers. After creating the sketches,

I proceeded to creating a mockup page of the homepage using photoshop,



What is Lorem Ipsum?

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to give a better view of how the colors, layout of content would actually look. This helped to establish how to create the body of the site using HTML and css to style it.

### 3 Implementation

The implementation of the site was fairly good from the HTML and CSS point. I was able to use old an framework I created previously from a YouTube tutorial. I helped me to establish quickly the style and layout of the website. I decided to keep the site navigation simple by not including a hamburger toggle and by keeping the site simple as the focus was to try to quickly decide which cipher to recreate using JavaScript.

However I wanted to make sure that the site would be responsive and mobile friendly. The new HTML5 functionality and the use of containers helped to create a lovely smooth movement of the site when it was re-sized or shrunk.

#### 3.1 Cipher Research

Researching for classical ciphers was easy to do as Wikipedia had a range of information to select from. I selected the Caesar cipher and the Reverse as the other I found were too difficult to tackle in my novice stage. However when I

became more able with JavaScript, I would like to try the vigenere cipher as that one involves using a word as a key and you can incorporate maths into the mix.

### 3.2 Building the website

To start with I looked up how to build responsive website on w3schools and my list of udemy courses. I came across selection of YouTube course on beginners JavaScript fundamentals. I used the rot13 activities from the lab and made list of keywords that I didn't understand and tried to make sense of where things go.

Finally I began to build the body of the site using HTML, I made sure to include the following: `<meta charset="utf-8">`, `<meta name="viewport" content="width=device-width">`, `<meta name="description" content="cipher, javascript, educational">`, `<meta name="author" content="Viana Maya">`, `<title>Webtech SET08101 Course-work1 — Welcome</title>`. The implementation of the css to style the pages were fun and easy to do once I organized the sections with comments. This helped me to easily find areas to change or get rid of.

### 3.3 JavaScript

I had to search high and low for examples to try to understand how to put this together. I knew I wanted to include table or text-area where the shift of the cipher could be changed so that the user could have more fun playing around with it. This cipher challenge was combination of watching many great and bad Caesar cipher YouTube videos.

## 4 Critical Evaluation

Looking at all of the learning outcome:

- LO1 I feel that I have described the internet and the technology standard well with the website and the content of the design page. More could have been added in areas such as accessibility, usability and functionality and testing to ensure that the set requirements were actually met.
- LO2 This area was addressed well in the time it took to complete the html and css. The planning and the execution of JavaScript was the weak link in this area. Although I planned for the coursework, I underestimated how difficult it was to actually create and program a cipher with JavaScript.
- LO3 This area of the assignment I feel was done well. I was comfortable navigating around visual studio code and was able to add plugins such as Lorem to make the experience faster and better to achieve the deadline.
- LO4 This area I definitely need to keep working on to develop better. The code created was a mash up of other codes and slowly it started to work and make sense, not fast enough to create better ciphers.

## 5 Personal Evaluation

This has been a great and stressful challenge: Creating the website has allowed me the opportunity to write a website from scratch using just HTML and css, rather than bootstrap. This I enjoyed as I was able to play with colours, style, images and minimizing my usual need to dazzle with rainbows. I enjoyed searching the website colour trends, understand more about the css grid -didn't use it this time-. The most challenge I had was understanding JavaScript quick enough to create awesome cipher. This lack of knowledge meant that I was not able to challenge myself as much as I would have liked. However facing the challenges I was able to do more research on learning and understanding programming languages quickly. I don't feel that this is my best work as I let myself get wrapped up with the little detail of learning every bit of JavaScript and not enough time just jumping straight into the coding of the ciphers.

## 6 Reference

- favorite site build a responsive Html <https://www.youtube.com/watch?v=Wm6CUkswsNwt=2656s>
- taken from <https://www.pexels.com/search/>
- <http://www.seth-dehaan.com/2016/01/21/freecodecamp-caesar-s-cipher/>
- [https://en.wikipedia.org/wiki/Classical\\_cipher](https://en.wikipedia.org/wiki/Classical_cipher)